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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/756,474 | 01/14/2004 | Karl-Gunther Hansel | 1996P08661WOUS | 1957 |
| 28204 | 7590 | 11/15/2004 | EXAMINER | |
| SIEMENS SCHWEIZ I-44, INTELLECTUAL PROPERTY ALBISRIEDERSTRASSE 245 ZURICH, CH-8047 SWITZERLAND | | | AZARIAN, SEYED H | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2625 | |

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/756,474

Applicant(s)

HANSEL ET AL.

Examiner

Seyed Azarian

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/202/759.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because the blank boxes in figures 1-3, lack description. Because it is difficult to ascertain what blank boxes are without having to dig through the specification, it is respectfully requested that these figures merely be provided with some simple description so that attorneys, examiners, and the public in general will be provided with a quicker way to search and a clearer patent disclosure. This benefits everyone.

Applicant is required to submit a proposed drawing correction in reply to this Office action. Failure to timely submit the proposed drawing correction will result in the abandonment of the application. The objection to the drawing will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 1-10 and 14-22, are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenbaum et al (U.S. patent 5,031,223).

Regarding claim 1, Rosenbaum discloses a system for sorting items, said items comprising a surface having a destination address thereon, said system comprising (column 3, lines 55-63, automated mail handling that supports mechanical separation of mail down to the delivery sequence);

a. a scanner for producing an image of said surface (column 4, lines 4-9, mail pieces are scanned by OCR (Fig. 1, item 20), the address information, city/state/zip line of address (surface of mail) ;

b. an OCR processor associated with said scanner and an address directory (column 4, lines 23-27, OCR performance and reviewing address data against a "Post Knowledge Base" (address directory));

said processor comprising means for receiving said image (column 5, lines 51-54, OCR scans the physical mail pieces and captured image);

means for decoding said image and means for determining if said decoding successfully arrived in a set of characters having a match in said address directory (column 5, lines 57-59, the OCR attempts to resolve the image of city/state/zip information into an alphanumeric character string of resolved address data);

means for receiving rule based characters and for limiting a plurality of database entries based upon said rule based characters, means for rerecording said image and means for determining if said rerecording successfully arrived in a set of characters having a match in said address directory (column 9, lines 6-

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14, the work station can perform a data base lookup of street names, whose spelling most closely approximate the alphanumeric character string and operator can select the appropriate alternative spelling, which is inserted at the selected street name into the portion of the address data block);

c. an image controller associated with said processor and a video encoding station, said controller comprising means for directing said image from said processor to said station when said decoding is unsuccessful (column 5, lines 11-13, the mail pieces that were rejected by the OCR because the address block could not be found);

other means for directing said image and a data input from said station to said processor after operator entry of said rule based characters (column 7, lines 1-20, unresolved portions of the city/state/zip/country codes in the image can be determined by operator, also column 9, lines 42-46, if city/state/zip code image is not resolved, then one of the operators at the work station will perform an operator assist to resolve the city/state/zip code information).

Regarding claim 2, Rosenbaum discloses the system according to claim 1, further comprising another processor associated with said address directory (column 4, lines 23-27, OCR performance and reviewing address data against a "Post Knowledge Base" (address directory);

said another processor comprising means for creating a list of directory entries limited by said data input and means for transmitting said list to said OCR processor (column 10, lines 46-60, data processing architecture for the off-line or remote processing system).

Regarding claim 3, Rosenbaum discloses the system according to claim 2, wherein said directory is integral with said station (column 9, lines 5-8, the work station can perform a data base lookup of street names).

Regarding claim 4, Rosenbaum discloses the system according to claim 2, wherein said OCR is integral with said workstation (Fig. 8, item 31 (work station), item 54 (OCR), also column 8, lines 54-60, scan image and work station).

Regarding claim 5, Rosenbaum discloses the system according to claim 2, wherein said directory is integral to said OCR processor (Fig. 8 and 9, column 8, line 56 through column 9, line 4, the address block (directory) can be displayed at an operator workstation and OCR, also column 6, lines 5-15, OCR connected to memory).

Regarding claim 6, Rosenbaum discloses the system according to claim 5, wherein said controller further comprises means for directing said list to said station when no match is determined (column 11, lines 6-36, if there is no corresponding match, also column 9, lines 42-46, when the operators at the work station will perform an operator assist to resolve the address).

Regarding claim 7, Rosenbaum discloses the system according to claim 6, wherein said station comprises means for receiving input from an encoder, said input comprising an indication of one of said list (column 5, lines 64 through column 6, line 15, and inputting mail piece).

Regarding claim 8, Rosenbaum discloses the system according to claim 1, further comprising a bar code printer associated with said controller, said

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printer printing a bar code on said item in response to a command from said controller (column 6, lines 36-39, the bar code printer prints the bar code).

Regarding claim 9, Rosenbaum discloses the system according to claim 8, wherein said command is made by said controller in response to an unsuccessful decoding (column 7, lines 1-6, the information which is not successfully recognized, then CPU directs the conveyor to send the mail pieces to the reject try).

Regarding claim 10, Rosenbaum discloses the system according to claim 9, further comprising a bar code reader located downstream from said bar code printer, said bar code reader facilitating retrieval of items stored based on bar codes printed thereon (Fig. 2, column 6 line 5-15, the barcode reader, sorting machine connected by connection, the mass store).

Regarding claim 14, Rosenbaum discloses the system according to claim 1, wherein said item is a mail piece (column 4, lines 5-8, "mail pieces" are scanned).

Regarding claim 15, Rosenbaum discloses the system according to claim 1, wherein said item comprises one of a flat mail piece (Fig. 2, conveyor 12 and mail piece 22, column 6, lines 58-64, identification number is imprinted by the bar code printer as the bar code onto the face of the mail piece (flat mail piece)).

Regarding claim 16, Rosenbaum discloses the system according to claim 1, further comprising: a. a track for transporting a plurality of items past said scanner (column 5, lines 64-66, mail piece passes beneath the OCR where it is scanned);

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b. a feeding device for receiving said items and selectively directing said items to said track (column 5, lines 66-67, the mail piece then continues on the conveyor belt (feeding device));

c. means for retrieving said items from a container and directing said items to said feeding device (column 6, lines 25-35, all information and address data is used to physically sort the mail piece into an appropriate pocket (or container) in the sorting machine).

Regarding claim 17, Rosenbaum discloses the system according to claim 16, wherein said container is a magazine (column 6, lines 25-30, magazine is a container or holder or pocket).

Regarding claim 18, Rosenbaum discloses the system according to claim 1, wherein said station comprises a monitor comprising means for displaying a plurality of images simultaneously to an encoder (Fig. 8, column 8, lines 54-60, scanned image 45 and the address block can be displayed at an operator workstation).

Regarding claim 19, Rosenbaum discloses the system according to claim 18, wherein said portion comprises initial letters of an address element manually entered into said station (Fig. 7 and 8, column 8, lines 54-66, address block can be displayed at workstation by operator).

Regarding claim 20, Rosenbaum discloses the system according to claim 1, further comprising means for using said OCR means to verify if a database entry is said destination address if said limited set comprises said database entry

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(column 10, lines 14-19, using data a base containing all of the valid street name for each of a plurality of cities).

Regarding claim 21 Rosenbaum discloses the system according to claim 1, further comprising means for requiring said database for a match of characters in said fixed number of keystrokes and any characters unambiguously decoded in said step of decoding (column 5, lines 7-10, re-keying is automatically terminated on a word-by-word bases).

Regarding claim 22, Rosenbaum discloses the system according to claim 1, wherein said OCR means comprises an OCR process in functional association with OCR software, a database, and a memory (Fig. 12, column 10, lines 64 through column 11, lines 6, OCR 132, memory 19 and base program 134).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 11-13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenbaum (U.S. patent 5,031,223) in view Mampe et al (U.S. patent 4,992,649).

Regarding claim 11, Rosenbaum does not explicitly state "a delay loop for delaying sorting of said items". On the other hand Mampe teaches an OCR logic processor the image, and the item is momentarily held in a mechanical delay line (delay loop) showing at Fig. 1, element 5 (column 3, lines 6-9).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Rosenbaum OCR processing according to the teaching of Mampe because it provides the time necessary for keying the mail pieces, mechanical delay loops hold the mail pieces in transit while the video information is being sequentially processed by the operators, which can implemented to a image scanning device such as OCR).

Regarding claim 12, Rosenbaum does not explicitly state, "delay loop is located upstream from bar code printer". On the other hand Mampe teaches mechanical delay loop (Fig. 1, element 5). At the delay line, the item presented to the bar code printer (located downstream from delay loop (Fig. 1, element 18, column 3, and lines 8-13).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Rosenbaum invention according to the teaching of Mampe because it provides processing information through code reading system that is responsively associated with the random

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access memory which can implemented to a image scanning device such as OCR).

Regarding claim 13, Rosenbaum does not explicitly state, "scanner is a high resolution scanner". On the other hand Mampe teaches image is scanned at the "high resolution" (column 3, lines 1-4).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Rosenbaum invention according to the teaching of Mampe because it provides improve and enhance the image recognition method and expedite identify and accuracy of existence of the desired image.

Other prior art cited

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(U.S. patent 5,249,687) to Rosenbaum et al is cited for barcode translation for deferred optical character recognition mail processing.

(U.S. patent 5,287,271) to Rosenbaum et al is cited for data processing system for optimized mail piece sorting and mapping to carrier walk sequence using real time statically data.

(U.S. patent 5,497,319) to Chong et al is cited for machine translation and telecommunications system.

(U.S. patent 5,538,138) to Reich is cited for method and device for sorting item provided with address information.

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(U.S. patent 5,966,457) to Lemelson is cited for method for inspecting coding and sorting objects.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (703) 306-5907. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached at (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information about the PAIR system, see [http:// pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Seyed Azarian
Patent Examiner
Group Art Unit 2625
November 4, 2004

